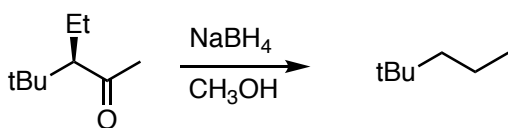
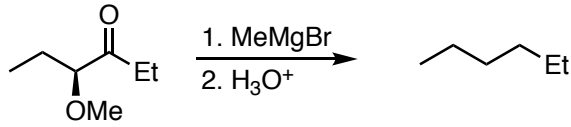


Chemistry 531
Carbonyl Addition Diastereoselectivity - Practice Problems

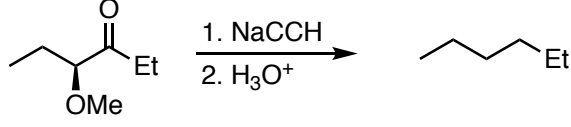
For each of the following, circle the expected mode of the reaction (Felkin-Anh or Cram Chelate), draw the reactive conformation, and draw the major product using the template provided.

1. 

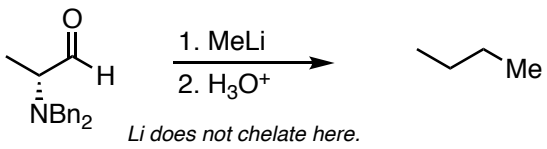
Felkin-Anh
Cram Chelate

2. 

Felkin-Anh
Cram Chelate

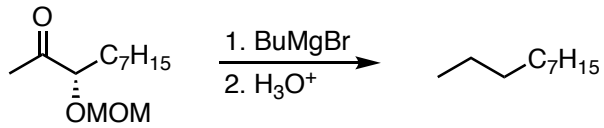
3. 

Felkin-Anh
Cram Chelate

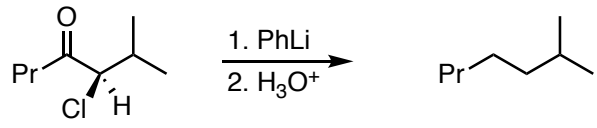
4. 

Li does not chelate here.

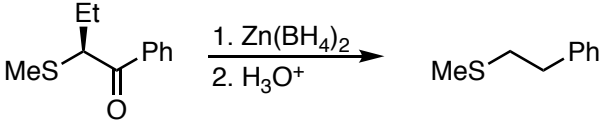
Felkin-Anh
Cram Chelate

5. 

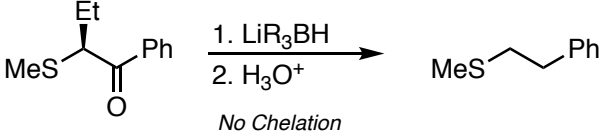
Felkin-Anh
Cram Chelate

6. 

Felkin-Anh
Cram Chelate

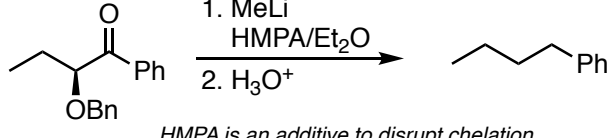
7. 

Felkin-Anh
Cram Chelate

8. 

No Chelation

Felkin-Anh
Cram Chelate

9. 

HMPA is an additive to disrupt chelation

Felkin-Anh
Cram Chelate